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| 10/071,196 | 02/11/2002 | Toshihiro Takagi | 3064IT/50912 | 2937 |
| 7590 Crowell & Moring, L.L.P. P.O. Box 14300 Washington, DC 20044-4300 | | 02/15/2008 | EXAMINER NEWLIN, TIMOTHY R | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/071,196

Applicant(s)

TAKAGI ET AL.

Examiner

Timothy R. Newlin

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12/4/2007 have been fully considered but they are not persuasive.

With respect to claim 1, the applicant argues that Liebenow does not disclose a numeral inputting key, and therefore does not teach the last limitation recited in claim 1. However, claim 1 merely recites a "numeral inputting key," which in the context of both the specification and common usage means any key labeled with a numeral. As the applicant concedes, Liebenow teaches selecting an operation mode via keyboard entry. Computer keyboards such as that used in Liebenow are not limited to letter entry, but facilitate the entry of any character including numerals. Moreover, the keys labeled USER 1 and USER 2 are numeral inputting keys insofar as they impart a numerical designation. The word "USER" label is merely a redundant label for user convenience; the numeral is the significant message conveyed by the press of the key.

The USER 1 keys taught by Liebenow also meet the limitation of a numerical key that is pressed to select a mode, wherein the numeral does not coincide with a channel number in memory. That is, the operation mode is selected because the USER 1 key corresponds to a selection number of an operation mode and does not coincide with a channel number in memory.

Regarding claim 5, the applicant argues that the term "input pattern" excludes an input sequence comprising a single key press. However, it remains the position of the office that a single key press does indeed anticipate a generic "input pattern" as recited in claim 5. "Pattern" is broadly defined as a consistent method, or a rule, convention, or practice. See American Heritage Dictionary, Fourth Ed., 2003. Liebenow does anticipate such a broad limitation by disclosing a consistent pattern: each button press corresponds to a single, entire command.

Claims 2 and 6 were rejected as obvious over the combination of Liebenow and Alexander. Applicant argues that these claims are distinguishable over the cited art because they require the pressing of two keys, in combination with each other, to select an operation mode. In effect, the user action is equivalent to pressing and holding a "shift" key on a keyboard or remote, a common technique vis-à-vis input devices. As stated in the first action, such a technique is motivated to provide added functionality to the user interface without increasing the number of buttons. One skilled in the art would appreciate the advantage of using this "shift" type combination via the directional keys disclosed by Alexander. Claims 2 and 6 remain rejected on this basis.

Applicant traverses the rejection of claim 3 on the grounds that Liebenow does not suggest selecting an operation mode with a numeral key, and that Thompson does not describe an operation mode selected by holding a button for a predetermined time. However, the rejection does not rely on the references for those limitations respectively.

Liebenow describes an operation mode selection, effected by keyboard entry and at least suggesting the use of numeric keys (see above discussion with respect to claim 1). Thompson discloses holding a button for a predetermined time in order to initiate a command or action within the guide. When combined with Liebenow, the command is to select an operation mode. As stated in the first office action, one skilled in the art would recognize the advantage of both providing a normal button function and using the same button to select an operation mode. Furthermore, such a technique is motivated to provide added functionality to the user interface without increasing the number of buttons.

Regarding claim 4, Applicant's argument that Liebenow does not apply is addressed above with respect to claim 1. As discussed therein, Liebenow is not deficient. Thus, Thrane is relied upon only for the font, color, and adjustment aspects of claim 4. The rejection stands based on the combination of the two references as stated in the first office action.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Liebenow, U.S. Patent No. 6,530,083.

3. Regarding claim 1, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35];**

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65];**

wherein the input device has a numeral inputting key for inputting a numeral when the operation mode is selected **[users may identify themselves via an enumeration, col. 4, 57-65];**

wherein the control unit assigns a predetermined selection number input by the user to the set operation mode and stores the selection number and the operation mode in correlation with each other in the memory **[col. 5, 16-18]** and

wherein when the user has operated the numeral inputting key to enter the selection number and the numeral inputting key does not coincide with a channel number stroed in the memory, the control unit refers to the memory to select the operation mode that corresponds to the selection number thus entered **[the USER 1 keys taught by Liebenow meet the limitation of a numerical key that is pressed to select a mode, wherein the numeral does not coincide with a channel number in memory. The operation mode is selected because the USER 1 key corresponds to a selection number of an operation mode and does not coincide with a channel number in memory; col. 8, 16-31]** on the OSD display and a background display color individually for each user.

4. Regarding claim 5, Liebenow discloses a broadcasting receiver comprising:

a memory for storing an operation mode of the receiver **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select the operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]**.

wherein the input device has a numeral inputting key for inputting a numeral when the operation mode is selected **[users may identify themselves via an enumeration, col. 4, 57-65]**;

wherein the control unit assigns a predetermined input pattern by use of the numeral inputting key to the operation mode and stores the operation mode in correlation with the input pattern in the memory **[col. 5, 16-18; the input pattern used in Liebenow is the user pressing the appropriate selection button once]** and, when the user operates the numeral inputting key in the input pattern, refers to the memory to select the operation mode that corresponds to the input pattern **[col. 8, 16-31]**.

5. Regarding claim 7, Liebenow does not explicitly teach using a numerical key to tune the channel whose number corresponds to that key. Official notice is taken that using a numeric key to select a channel with the corresponding number is a fundamental and obvious technique of using a remote control. One of ordinary skill in the television art would know that using the remote control of Liebenow in this way would allow users to easily select a numbered channel.

6. Regarding claims 8 and 13; Liebenow discloses a digital/analog broadcasting receiver wherein when the control unit selects the operation mode when a broadcasting image is output to the display, the user has operated the numeral inputting key to enter the selection number and the numeral inputting key does not coincide with a channel number stored in the memory **[the USER 1 keys taught by Liebenow meet the limitation of a numerical key that is pressed to select a mode, wherein the numeral does not coincide with a channel number in memory. The operation mode is selected because the USER 1 key corresponds to a selection number of an operation mode and does not coincide with a channel number in memory; col. 8, 16-31; for display].**

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow as cited above in view of Alexander et al., U.S. Patent No. 6,177,931.

9. Regarding claim 2, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35];**

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65].**

While Liebenow does not specifically show directional keys per se, it does teach the use of preassigned switches on an input device to select an operation mode for a specific user. Alexander discloses a system that customizes EPG presentation based on viewer profile information, including a remote input device having up/down and right/left keys **[Fig. 2]**. It would have been obvious to one of ordinary skill in the art to use the directional keys of Alexander to accomplish the operation mode selection function taught by Liebenow. The motivation is to provide a simple interface utilizing

existing buttons to accomplish the desired function, rather than add buttons to the remote control.

10. Regarding claim 6, Liebenow discloses a broadcasting receiver comprising:
a memory for storing an operation mode of the receiver **[memory 104 and 106, Fig. 1, col. 3, 40-50]**;
a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24]**; and
an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select the operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]**.

While Liebenow does not specifically show directional keys per se, it does teach the use of preassigned switches on an input device to select an operation mode for a specific user. Alexander discloses a system that customizes EPG presentation based on viewer profile information, including a remote input device having up/down and right/left keys **[Fig. 2]**. It would have been obvious to one of ordinary skill in the art to use the directional keys of Alexander to accomplish the operation mode selection function taught by Liebenow. The motivation is to provide a simple interface utilizing existing buttons to accomplish the desired function, rather than add buttons to the remote control.

11. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow in view of Thompson et al., U.S. Patent No. 5,644,354.

12. Regarding claim 3, Liebenow discloses a digital/analog broadcasting receiver comprising:

a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station **[tuner, col. 4, line 23; col. 4, 31-35];**

a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display which displays an image **[digital signal processor and display system 112, cols. 3-4, lines 63-16];**

a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder **[memory 104 and 106, Fig. 1, col. 3, 40-50];**

a control unit for controlling each of the other sections of the receiver **[CPU 102, Fig. 1, col. 3, 19-24];** and

an input device for a user to input an operation instruction to the control unit, wherein the control unit has a function to set and select an operation mode of the receiver for each user based on inputs by a plurality of users who use the input device **[input device 118, col.4, 64-65]** characterized in that,

the input device has a numeral inputting key for inputting a numeral when the operation mode is selected **[users may identify themselves via an enumeration, col. 4, 57-65];** and

the control unit assigns a predetermined selection number input by the user to the set operation mode and stores the selection number and the operation mode in correlation with each other in the memory [col. 5, 16-18] and also, when the user has operated the numeral inputting key to enter the selection number, refers to the memory to select the operation mode that corresponds to the selection number thus entered [col. 8, 16-31].

The mode selection in Liebenow does not activate based on pressing a button for a predetermined time. Thompson discloses a video guide system that identifies the desired button function based on the user holding down the button for a predetermined time [col. 8, 2-8]. The function of the button is specifically related to holding down the button rather than pressing it quickly. It would have been obvious to one of skill in the art to select an operation mode as taught by Liebenow in response to a button pressed for a predetermined time as taught by Thompson. As suggested by Thompson, one would be motivated as such in order to distinguish between pushing the button to achieve the normal function associated with that button and pushing the button to select a mode [see col. 8, 5-8].

13. Regarding claim 11, Liebenow does not explicitly teach pressing, for less than a predetermined time, a numerical key to tune the channel whose number corresponds to that key. Official notice is taken that using a numeric key (by pressing it once and not holding it for any predetermined length of time) to select a channel with the corresponding number is a fundamental and obvious technique of using a remote

control. One of ordinary skill in the television art would know that using the remote control of Liebenow in this way would allow users to easily select a numbered channel.

14. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow as cited above in view of Thrane, U.S. Patent No. 7,149,969. Liebenow discloses the limitations of claims 1 and 5 as discussed above, but does not show the customization of font and color. Thrane concerns a server/client architecture in which presentation format is modified according to user preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type, size, and display color of the channel information displayed **[font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]**. Thrane also states the motivation to for dynamic adjustment of broadcast content **[abstract; col. 1, 59-62]**. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

15. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Alexander as cited above with respect to claim 2, and further in view of Thrane, US 7,149,969. Liebenow and Alexander disclose the limitations of claim 2 as discussed above, but do not show the customization of font and color. Thrane concerns a server/client architecture in which presentation format is modified according to user preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type, size, and display color of the channel information displayed **[font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]**. Thrane also states the motivation to for dynamic adjustment of broadcast content **[abstract; col. 1, 59-62]**. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

16. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liebenow and Thompson as cited above with respect to claim 3, and further in view of Thrane, US 7,149,969. Liebenow and Thompson disclose the limitations of claim 3 as discussed above, but do not show the customization of font and color. Thrane concerns a server/client architecture in which presentation format is modified according to user

preferences. Specifically, Thrane teaches a receiver comprising an on-screen display (OSD) for displaying the channel information on the display connected to the receiver, wherein the operation mode is adapted to set a font type, size, and display color of the channel information displayed [font and color are presented in font and color based on the preferences of the clients' user, cols. 3-4, lines 64-2]. Thrane also states the motivation to for dynamic adjustment of broadcast content [abstract; col. 1, 59-62]. It would have been obvious to one of ordinary skill to combine Liebenow and Thrane, in order to provide dynamic adjustment of presentation format to meet the varying needs of end users, rather than provide a static, one-size-fits-all presentation. Users can thus benefit from a presentation format customized to their needs exactly instead of settling for a format that represents a compromise among the entire user base.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Newlin whose telephone number is (571) 270-3015. The examiner can normally be reached on M-F 9-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRN


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